

Claims:

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1. A method for identifying a compound capable of modulating the action of the DLG5 protein which method comprises subjecting one or more test compounds to a screen comprising a polypeptide containing the amino acid sequence shown in SEQ ID NO: 2, or a homologue thereof or a fragment of either.
2. A method for identifying potential anti-IBD therapeutic compounds comprising contacting an assay system capable of detecting the effect of a test compound against expression level of DLG5, with a test compound and assessing the change in expression level of DLG5.
3. A method of screening for a compound potentially useful for treatment of IBD, which comprises assaying the compound for its ability to modulate the activity or amount of DLG5.
4. The method according to claim 3, which involves a method selected from:
 - (i) measurement of DLG5 activity using a cell line which expresses the DLG5 polypeptide or using purified DLG5 polypeptide; and
 - (ii) measurement of *dlg5* transcription or translation in a cell line expressing the DLG5 polypeptide.
5. A cell comprising a reporter gene under the control of the *dlg5* promoter.
6. A method of testing potential therapeutic agents for the ability to suppress IBD phenotype comprising contacting a test compound with a cell engineered to express the DLG5 polypeptide; and determining whether said test compound modulates expression of the DLG5 polypeptide.
7. A method for identifying inhibitors of transcription of *dlg5*, which method comprises contacting a potential therapeutic agent with a cell or cell line as described above and determining inhibition of *dlg5* transcription by the potential therapeutic agent by reference to a lack of or reduction in expression of the reporter gene.

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8. A method of preparing a pharmaceutical composition comprising:
 - i) identifying a compound as useful for treatment of IBD according to a screening method as described herein; and
 - ii) mixing the compound or a pharmaceutically acceptable salt thereof with a pharmaceutically acceptable excipient or diluent.
- 5 9. Use of a compound able to modulate the activity or amount of DLG5 in the preparation of a medicament for the treatment of IBD.
- 10 10. A method for the diagnosis of IBD or determining susceptibility to develop IBD, which method comprises:
 - (i) obtaining a protein or nucleic acid containing sample from an individual;
 - (ii) detecting the presence or absence of a variant DLG5 on the basis of the presence of a polymorphic amino acid within the DLG5 protein, or a 15 polymorphic base within the dlg5 gene sequence; and,
 - (iii) determining the status of the human by reference to the presence or absence of a polymorphism in DLG5.